

TREMBOVEL'SKIY, Dmitriy Ivanovich; ZANEVSKIY, M.S., redaktor; SOKOL'SKIY,
I.P., redaktor; KONYASHINA, A., tekhnicheskii redaktor.

[Hydraulic rams for simple water supply lines] Gidravlicheskie
tarany dlia prostykh vodoprovodov. Moskva, Izd-vo Ministerstva
kommunal'nogo khoziaistva RSFSR, 1956. 96 p. (MLRA 9:6)

(Hydraulic rams) (Water supply, Rural)

12-31-65 EAT(d)/EAT(2)/EAD-2/EM(h) Feb

ACCESSION NR: AP5007031

3/0120/65/000/001/0086/0081

AUTHOR: Golutvin, I. A.; Zanevskiy, Yu. V.

TITLE: Nanosecond coincidence circuit using transistors and tunnel diodes 21

SOURCE: Priory i tekhnika eksperimenta, no. 1, 1965, 86-89 15 13

TOPIC TAGS: coaxial cable transmission, pulse shaper, coincidence circuit, photo-multiplier, tunnel diode discriminator

ABSTRACT: A sensitive two-channel coincidence circuit for scintillation counters is proposed with a view toward reducing pulse distortion in signal transmission over coaxial cables. Essentially, the circuit consists of two pulse shapers and a discriminator and operates on the principle of summation of signals which are standardized with respect to duration and amplitude. The discriminator uses a tunnel diode. The resolving time of the circuit, measured with Co^{60} and Na^{22} sources, was approx 1.5 nanosec. The dead time of a channel on the basis of dual pulses was approx 10 nanosec. The sensitivity of the circuit can be as high as 50-100 mv. Orig. art. has: 11 figures. [JR]

ASSOCIATION: Ob'yedinennyy institut yadernykh issledovaniy (Joint Nuclear Research Institute)

Card 1/2

L 3231-65

ACCESSION NR: AP5007031

SUBMITTED: 19Jan64

NO REP SOV: 001

ENCL: 00

OTHER: 002

SUB CODE: EC

ATD PRESS: 3202

Card 2/2

ACCESSION NR: AP4047469 230407/1 11477 5/0120/64/000/003/0114/0119

AUTHOR: Galutvin, I. A.; Zanevskiy, Yu. V.

TITLE: A system of universal modules for scintillation counters

SOURCE: Pribury* i tekhnika eksperimenta, no. 5, 1964, 114-119

TOPIC TAGS: universal module, scintillation counter, pulse shaper, tunnel diode, coincidence circuit, anticoincidence circuit, GaAs tunnel diode, wide band amplifier, common emitter circuit

ABSTRACT: The following four universal circuits to be used with scintillation counters have been developed: 1) The first shaping circuit whose basic function is the standardization of pulses at the scintillation counter output. It utilizes three transistors, one of which is biased with a current of ~ 5 mamp and protects against overloads, while the other two insure the power amplification of the limited signal. The output signal of the first shaping circuit is either a positive or a negative pulse of ~ 10 nsec in duration and ~ 0.4 v in height. The dead time is ~ 30 nsec. 2) Next is a four-

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L 14574-65

ACCESSION NR: AP4047469

channel coincidence or anticoincidence circuit which utilizes four diodes. The application of negative pulses produces coincident mode of operation while the utilization of positive pulses results in the anticoincident mode of operation. 3) A second shaping circuit is connected after the coincidence circuit and functions as a discriminator. It utilizes a monostable multivibrator based on a GaAs tunnel diode. The output signal of the circuit is a negative pulse of 15 nsec duration and 0.7 v height. The output impedance is 50 ohms. 4) The wide-band amplifier consists of three common-emitter transistors. The first two transistors are d-c coupled while the third uses an emitter-follower circuit. The amplifier gain is 8, the pulse rise time is several nsec. The output impedance is 50 ohms. Orig. art. has: 14 figures.

ASSOCIATION: Ob'yedinennyy institut yadernykh issledovaniy (Joint Institute of Nuclear Research).

SUBMITTED: 05Oct63

ENCL: 00

SUB CODE: EC

NO REF SOV 000

OTHER: 002

Cont 2/2

GOLUTVIN, I.A.; ZANEVSKIY, Yu.V.

System of universal moduli for scintillation counters. Prib.
i tekhn. eksp. 9 no.5:114-119 SMO '64. (MIRA 17:12)

1. Ob"yedinennyy Institut yadernykh issledovaniy.

HUNGARY

ZANCEL, Vera, Dr, MASSZI, Jozsef, Dr; Medical University of Budapest, Dermatological and Venereological Clinic (director: FOLDVARI, Ferenc, Dr) (Budapesti Orvostudományi Egyetem, Bor-Nemikortani Klinika).

"Three Cases of Steroid Diabetes Leading to Ketosis."

Budapest, Orvosi Hetilap, Vol 108, No 9, 26 Feb 67, pages 395-396.

Abstract: [Authors' Hungarian summary] Three cases of steroid diabetes involving transient ketosis, an occurrence not previously reported in the literature, are described. On the basis of the clinical symptoms and laboratory findings, the ketosis can be accepted as documented. In addition to the exhaustion of insulin reserves, other metabolic disturbances may also contribute to its development. Attention is called to the importance of an adequate evaluation of the early precomatous symptoms and of a routine testing for acetone in the urine. All 5 references are Hungarian.

FEHER, L., dr.; ZANGEI, V., dr.

Treatment of steroid diabetes with oradian. Ther. Hung. 13 no.1:
17-20 '65

1. 2nd Department of Medicine (Director: Prof. P. Gomori), and
Department of Dermatology (Director: Prof. F. Foldvari),
University Medical School, Budapest.

ZANGIYEV, M.G.

Seasonal and annual dynamics of the amount of forest litter in
principal beech forest types and its effect on soil formation and
forest reproduction. Izv. AN Azerb. SSR. Ser. biol. i med. nauk
no.6:11-20 '61. (MIRA 14:8)

(~~CAUCASUS~~ ~~BEECH~~) (FOREST LITTER)

ZANOIYEV, M.G.

Recent data on the occurrence of certain plants in Azerbaijan.
Dokl. AN Azerb. SSR 16 no. 4: 377-379 '60. (MIRA 13:7)

1. Institut botaniki AN AzerSSR. Predstavleno akad. AN AzerSSR
G.A. Aliyevym. (Azerbaijan--Botany)

ZANGIYEV, M. G., CAND BIO SCI, "SEASONAL DYNAMICS OF
LITTER RESERVES OF THE ^{principal} MOST-~~PREDOMINANT~~ TYPES OF BEECH
FOREST AND ITS ^{effect upon} ~~INFLUENCE~~ ON FOREST REGENERATION PROCESSES."
BAKU, 1961. (COM ^{litter of} FOR HIGHER AND SEC SPEC ED OF THE COUNCIL
OF MINISTERS AZSSR. AZERBAJDZHAN STATE UNIV IMENI S. M.
KIROV. ACAD SCI AZSSR. INST OF BOTANY IMENI V. L. KOMAROV).
(KL-DV, 11-61, 214).

-82-

PRILIPKO, L.I.; ZANGIYEV, M.G.

Forests of the Khachma Lowland and the ways for their rational
utilization. Izv. All Azerb. SSR. Ser. biol. i med. nauk no. 1-3-
8 '63. (MIR 17:5)

ZANGIYEV, M.G.

Seasonal dynamics of litter in principal beach forest types of
the Belokany-Zakataly mountain massif. Izv. AN Azerb. SSR. Ser.
biol. i med. nauk no. 4:11-18 '60. (MIRA 14:2)

(ZAKATALY REGION—FOREST LITTER)

(BELOKANY REGION—FOREST LITTER)

ZANGIYEV, M.G.

New data on the distribution of some plants in Azerbaijan. Dokl.
AN AzerbSSR 20 no.10:73-76 '64. (MIRA 8:1)

1. Institut botaniki AN AzerbSSR.

ZANGURIN, Sh.M.; GORDEYEV, N.V.; TSYNGALOV, V.D.

Flaskless precision casting of blocks. Prom.energ. 16 no.7:
7-8 J1 '61. (MIRA 15:1)

(Precision casting)

S/094/61/000/007/001/005
E073/E335

AUTHORS: Zangurin, Sh.M., Gordeyev, N.V. and
Tsyngalov, V.D.

TITLE: Flaskless Casting of Precision Cast Blocks
PERIODICAL: Promyshlennaya energetika, 1961, No. 7,
pp. 7 - 8

TEXT: In one of the undertakings precision casting by the lost-wax method was carried out by placing the moulds, prior to teeming of the metal, into flasks which were then filled with dry sand. This was essential since the moulds were produced from hydrolized ethyl silicate and in spite of applying four refractory coatings they were not strong enough. Before teeming, the flasks were heated in an electric furnace to 900-950 °C. The authors proposed a new technology which ensured sufficient strength and obviated the necessity of using flasks. In the same way as before, the moulds were coated with four layers of refractory, two of which contained liquid glass. The layers with liquid glass were deposited on the ethyl-silicate films and acted as reinforcing layers. These layers
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S/094/61/000/007/001/005
E073/E335

Flaskless Casting

contained: liquid glass; quartz powder (artificial marshallite); refractory clay; hydrochloric acid. Before preparing the rendering the modulus of the liquid glass had to be increased to 3 to 3.5 by adding hydrochloric acid to it. The quantity of hydrochloric acid per 1 litre of liquid glass should be as follows:

| | | | | | |
|-------------------------------|-----|-----|-----|-----|-----|
| Modulus of the liquid glass | 2.6 | 2.7 | 2.8 | 2.9 | 3.0 |
| 100% hydrochloric acid, parts | 25 | 20 | 17 | 12 | 8 |

The acid has to be diluted with water before adding it to liquid glass. The specific weight of the liquid glass, which is diluted with hydrochloric acid, should be 1.2 - 1.25. The refractory clay was roasted in the furnace at 500-600 °C for 2-3 hours and passed through a sieve No. 40. The marshallite was passed through a sieve No. 40 without processing. The rendering was prepared by simple mixing of the liquid glass, the ground clay and the marshallite in a 1:1 ratio.

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Flaskless Casting

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Before use, the rendering should be passed through a 12-20 sieve to remove lumps. Sequence of the operations:

- 1) dipping of the mould block into the tank containing the rendering;
- 2) producing a uniform layer of rendering throughout the entire surface;
- 3) spraying of the block with dry quartz sand;
- 4) cleaning of the edges of the boat mould from the rendering;
- 5) drying of the block for four hours at 25 - 30 °C.

As a result of using this method, ceramic moulds with a satisfactory strength were obtained which were able to withstand firing in the furnace at temperatures up to 800-900 °C.

Mould blocks produced by this method do not require the use of flasks and, as a result, it is possible to increase considerably the number of moulds charged into the firing furnace and to reduce the firing time, since the thin ceramic blocks are heated much more quickly than moulds placed into heavy sand-filled iron mould boxes. To maintain a stable position during teeming the mould is placed into a dry-sand bed, as shown in

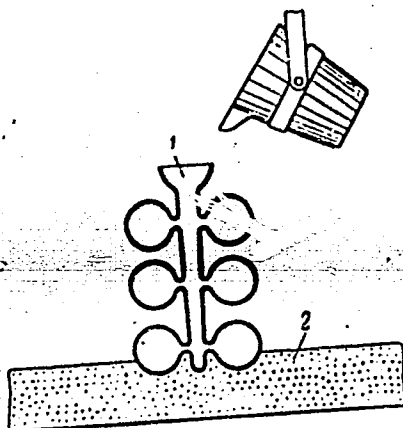
Card 5/4

S/094/61/000/007/001/005
E075/E335

Flaskless Casting

Fig. 2. As a result of applying this technology, an annual saving of over 1 million kW hours of electricity was obtained. (Abstractor's note: this is a slightly abridged translation.) There are 2 figures and 1 table.

Fig. 2:



Card 4/4

ZANIEMOJSKI, J.

The roads of technical progress in the Soviet textile industry in the period of the sixth Five-Year Plan. p. 420.
(PRZEMYSŁ WŁOKIENNICZY. Vol. 10, no. 9, Sept. 1956, Lodz, Poland)

SO: Monthly List of East European Accessions (EEAL) LC. Vol. 6, No. 12, Dec. 1957.
Uncl.

POLAND / Chemical Technology. Chemical Products and Their Applications. Artificial and Synthetic Fibers. H

APPROVED FOR RELEASE: 09/19/2001

CIA-RDP86-00513R001963810003-0"

Abstr Jour : Ref Zh Khim., No 12, 1959, No 44342

Author : Zaniemojski, J.

Inst : Not given

Title : The Future of Synthetic Fibers

Orig Pub : Techn. włokienn., 1958, No 9, 273-274

Abstract : None given

Card 1/1

H-69

POLAND / Chemical Technology. Chemical Products and Their Applications. Artificial and Synthetic H-32

ZANIEWSKA, E.

Supply the growers of tobacco is the basis of a high yield.

p. 4 (Rolnik Spoldzielca. Vol. 9 (i.e. 10) no. 12, Mar. 1957. Warszaw, Poland)

Monthly Index of East European Accessions (EEAI) IC. Vol. 7, no. 2,
February 1958

ZAJNIEWSKI, H.

Changes in the turnover of grain, with regard to the new General Conditions of Delivery.

p. 4 (Rolnik Spoldzielca. Vol. 9 (i.e. 10) no. 13, Mar. 1957. Warszaw, Poland)

Monthly Index of East European Accessions (EEAI) LC. Vol. 7, no. 2,
February 1958

ZANIEWSKI, H.

The mobile traction conductor in city communication. Przegl techn no.38:5
21 8 '60

ZANIEWSKI, H.

ZANIEWSKI, H.

For the correct procedure of purchasing grain of the 1957 crop.

P. 7 (Rolnik Rolnictwo) Vol. 9, No. 13, Oct. 1957, Warszawa, Poland

SO: MONTHLY INDEX OF EAST EUROPEAN ACCESSIONS (EEAI) LC, VOL. 7, NO. 1. Jan? 1958

POLAND

JACZEWSKI, Zbigniew and ZANIEWSKI, Leon. Experimental Research Office (Zaklad Doswiadczalny), PAN [Polska Akademia Nauk, Polish Academy of Sciences] in Popielno (Director: Docent, Dr. Zbigniew JACZEWSKI)

"Action of Combelen on the Stag (Cervus elaphus L.)."
Warsaw-Lublin, Medycyna Weterynaryjna, Vol 19, No 7, Jul 63, pp 379-381

Abstract: [Authors' English summary] The experiments were conducted on 5 stags and 1 doe of the Red deer. Combelen was administered intramuscularly in 4 and intravenously in 5 cases. Results, given in a table, show that the optimal intravenous dose for stags is 20 ml of Combelen per 100 kg of body weight and that the Red deer is considerably less susceptible to Combelen than the domestic animals. There are 2 references: one each Polish and English.

L1/1

ZANIN, V.

ZANIN, V., podpolkovnik; CHERKASOV, M., leytenant; KLINOV, V., starshiy leytenant; DITS, G., mayor; LEBEDEV, I., mayor; FEDOROV, H., mayor; POTAPOV, A., gvardii starshina; BORISENKO, P., gvardii polkovnik.

Markings for cross-country routes and passages through obstructions; suggestions from engineering units. Voen.-inzh. zhur. 101 no.4:28-33 Ap '57. (MLBA 10:6)
(Obstacles (Military science))

ZANINA, A. A.

Description of the climate of Rumania Leningrad, Redaktsionno-izdatel'skii
otdel TSUEGMS, 1936. 75 p. maps. 48-37943

QC989.R17Z3

ZANINA, A.S.
KOTLYAREVSKIY, I.L., ZANINA, A.S.

Synthesis of n-xylol. Zhur. prikl. khim. 30 no.9:1356-1361 S '57.
(Xylone) (MIRA 11:1)

21

Use of mazout fuel by Roumanian railroads. A. ZANESCU. Ann. mines Rou-
manie 13, No 7, 223-6(1930).—Use of mazout as locomotive fuel is discussed. The
system employed is to mix mazout with lignite which affords possibility of large-scale
utilization of low-grade solid fuels in conjunction with mazout. R. I. B.

ADDITIONAL METALLURGICAL LITERATURE CLASSIFICATION

ZANGER, A.

ZANGER, A. Shall we drive more safely in our country at night, also? p. 376

Vol. 10, no. 12, 1956, June
SVET MOTORU
TECHNOLOGII
Praha, Czechoslovakia

So: East European Accession Vol. 6, no. 2, 1957

ZANGIYEV, T. Kh.

PA 14T88

USSR/Medicine - Prophylaxis
Medicine - Bacteriology

Jun 1947

"Some Prophylactic Measures in Anaerobic Infection,"
T. Kh. Zangiyev, 3 pp

"Voyenno Med Zhur" No 6

Discussion, with statistical table, to the effect
that general sanitary measures are very important
in anaerobic prophylaxis, that a wound should be
treated immediately, with injection of 5 doses of
anti-gangrene serum, etc.

14T88

ZANGIYEV, T. Kh.

^Y
ZANGIYEV, T. KH.
_^

Professor N. A. Bogoraz. Fel'dsher & akush. No. 11, Nov. 50.
p. 36-41

1. Candidate Medical Sciences.

GLML 20, 3, March 1951

BC

a-2

Composition of pegmatite feldspar as a criterion
of their hydrogenetic origin. E. ZANIEWSKA.
CHIMIA I REA (Arch. Min. Soc. Sci. Varsovie, 1967, 7,
49--51). --Kiesztw mikrocline has the composition:
 SiO_2 64.45, Al_2O_3 18.90, Fe_2O_3 0.33, BaO 0.20, CaO
0.32, K_2O 12.13, Na_2O 2.7, H_2O 0.38%. Feldspars of
igneous origin have the ratio $\text{Al}_2\text{O}_3:\text{SiO}_2=1:6$; for
those of pegmatitic origin it is $1: <6$. This indicates
the hydrogenetic origin of such feldspars, which would
have been deposited from colloidal solutions of
igneous feldspar.

R. T.

1ST AND 2ND COLUMNS

PROCESSES AND PROPERTIES INDEX

8

Ca

COMPOSITION OF PEGMATIC FELDSPARS AS A CRITERION OF THEIR HYDROGENETIC ORIGIN. E. ZAMIRSKAYA-CHIRCHIKSKAYA. *Arch. mineral. soc. sci. Varsovie* 7, 49-81(1931).—Kieslow mikrocline has the compn.: SiO_2 64.55, Al_2O_3 18.90, Fe_2O_3 0.33, BaO 0.20, CaO 0.32, K_2O 13.13, Na_2O 2.7, H_2O 0.38%. Feldspars of igneous origin have the ratio $Al_2O_3:SiO_2 = 1:6$; for those of pegmatite origin it is $1: < 6$. This indicates the hydrogenetic origin of such feldspars, which would have been deposited from colloidal solns. of igneous feldspar. B. C. A.

AND-564 METALLURGICAL LITERATURE CLASSIFICATION

1ST AND 2ND COLUMNS

PROCESSES AND PROPERTIES INDEX

24

Composition of some adularias. *Eugenia Zaniewska*.
Chłpalska. *Arch. mineral. soc. varsovie* 13, 20-31
(1937); *Neues Jahrb. Mineral. Geol.*, Ref. 1, 1938, 485-6.
Three accurate analyses of adularia are given, and the
differences discussed; it is inferred that BaO can replace
K₂O to some extent owing to the closeness of the at. radii
of the elements. C. A. Sillwerd

ASM-31A METALLURGICAL LITERATURE CLASSIFICATION

ZANIVICZ (V. E.). Влияние гриба *Trichoderma lignorum* на нара-
щение прочности структуры почвы и урожайность озимой
Пшеницы и Овса. [The influence of the fungus *Trichoderma*
lignorum on the consolidation of soil structure and the yield of
Winter Wheat and Oats.]—Научн. Зам. по Сахарн. Пром. [Sci.
Notes Sug. Ind.], Kieff, [Grey Ser.], xvii, 1-2, pp. 122-125, 1940.

Soil inoculation with *Trichoderma lignorum* [*T. viride*: R.A.M., xix,
p. 322] in a field near Kieff, Ukraine, during 1938 considerably pro-
moted the consolidation of soil structure and increased the yield of
winter wheat by from 5.5 to 6.8 per cent. where the inoculation was
carried out in spring and in autumn, and by from 13.3 to 14.0 per cent.
where it was done only in autumn. Oats grew better on inoculated
soil and gave an increase in yield of 6.5 per cent. when the soil was
inoculated in autumn, and one of 4.7 per cent. when seeds were inocu-
lated in spring.

ZANIEMOJSKI, J.

ZANIEMOJSKI, J. Problems of scientific-technical documentation in the textile industry.
p. 101

Vol. 10, no. 2, 1956
PRZEMYSŁ WŁOKIENNICZY
TECHNOLOGY
Lodz, Poland

So: East European Accession Vol. 6, no. 2, Feb. 1957

ZANJKO, A. M.

"Essai d'utilisation de solutions non aqueuses dans la polarographie".,
Zanjko, A. M. et Manusova, F. A., (p. 1171)

SO: Journal of General Chemistry (Zhurnal Obshchei Khimii) 1940, Volume 10, no. 13.

ACCESSION NR: AP4041639

S/0114/64/000/006/0039/0040

AUTHOR: Troyanovskiy, B. M. (Candidate of technical sciences, Docent);
Zanin, A. I.; Kazintsev, F. V. (Engineer)

TITLE: Higher economy of a stage in which stamped blades were replaced with milled blades

SOURCE: Energomashinostroyeniye, no. 6, 1964, 39-40

TOPIC TAGS: steam turbine, steam turbine blade, stamped turbine blade, milled turbine blade, steam turbine economy

ABSTRACT: The last stage of a VPT-25-4 (Ural Turbomotor Plant) steam turbine was tested under various conditions with (a) stamped nozzle blades and (b) MEI-designed milled varying-thickness blades having the same effective $\sin \alpha$, = 0.266. The stage efficiency was 80-81% and 86% for the first and second diaphragms, respectively. The tests were staged with pressure ratios

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ACCESSION NR: AP4041639

corresponding to subsonic speeds in the diaphragms, and with natural Reynolds numbers $[Re = b, c, / \sqrt{\nu} = (1.3-2.0) \times 10^5]$. Orig. art. has: 2 figures.

ASSOCIATION: Moskovskiy energeticheskiy institut (Moscow Power-Engineering Institute)

SUBMITTED: 00

ENCL: 00

SUB CODE: FR

NO REF SOV: 002

OTHER: 000

Card 2/2

GOLOVIN, V.A., inzh., dissertant; ZANIN, A.I., inzh.; KAZINTSEV, F.V.,
inzh., dissertant

Methods for studying models of the terminal stages of steam
turbines operating on wet steam. Teploenergetika 12 no.3:71-
75 Mr '65. (MIRA 18:6)

1. Moskovskiy energeticheskiy institut.

KAZINTSEV, F.V., inzh.; TROYANOVSKIY, B.M., kand.tekhn.nauk; ZANIN, A.I., inzh.

Study of a steam turbine stage with $d/l=2,75$. Teploenergetika
12 no.1:35-39 Ja '65. (MIRA 18:4

1. Moskovskiy energeticheskiy institut.

TROYANOVSKIY, B.M., kand. tekhn. nauk, dotsent; KAZINTSEV, F.V., inzh.;
ZANIN, A.I., inzh.

Increase of stage efficiency resulting from the replacement of
stamped nozzle blades with milled ones. Energomashinostroenie
10 no.6:39-40 Je '64. (MIRA 17:9)

BC A-1

1ST AND 2ND SEVER PROCESSING AND PROPERTIES INDEX 1ST AND 2ND SEVER

Successive potentiometric determination of sulphide, thiocyanate, and chloride ions. A. I. BUNIN and A. M. ZANIKO (Ber. Ukrain. wiss. Forsch.-Inst. phys. Chem., 1954, 4, 83-88).—To the aq. solution of the alkali salts are added 10 g. $\text{Ba}(\text{NO}_3)_2$ and 10 ml. of conc. aq. NH_3 , the solution being diluted to 100 ml. The solution is titrated potentiometrically with AgNO_3 with a Ag electrode, the first break in the curve giving the S^{2-} content. The solution is then acidified with HNO_3 . The next break gives the CN^- and the last the Cl^- . Ch. Ans. (c)

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

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621964 | 621965 | 621966 | 621967 | 621968 | 621969 | 621970 | 621971 | 621972 | 621973 | 621974 | 621975 | 621976 | 621977 | 621978 | 621979 | 621980 | 621981 | 621982 | 621983 | 621984 | 621985 | 621986 | 621987 | 621988 | 621989 | 621990 | 621991 | 621992 | 621993 | 621994 | 621995 | 621996 | 621997 | 621998 | 621999 |
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| 4-5350-66 | ENT(M)/EPT(R)/T | DI |
| ACC NR: | A25026559 | |
| INVENTOR: | Gafanovich, A. A.; Zanin, A. V.; Vldishev, B. G.; Fillimonov, V. N. | SOURCE CODE: UR/0286/65/000/019/0114/0114 |
| ORG: | none | |
| TITLE: | Cardan shaft with protective housing. Class 47, No. 175358 | |
| SOURCE: | Byulleten' izobreteniy i tovarnykh znakov, no. 19, 1965, 114 | 3/b |
| TOPIC TAGS: | Cardan shaft, universal joint | |
| <p>ABSTRACT: An Author Certificate has been issued for a Cardan shaft consisting of a protective housing in the form of a telescoping tube with hemispheres, a shaft, and joints with grooved yokes. To better protect the Cardan shaft and prevent the housing's rotation, the housing is equipped with outer hemispheres connected to inner hemispheres by rings located in the universal joint's plane of vibration (See Fig. 1) and mounted on sealed ball bearings installed on the hubs of the grooved</p> <p>11, 44</p> | | |
| Card 1/2 | UDC: 621-76-233.1.825.6 | 0951 1209 |

L 5356-66

ACC NR: AF0026559

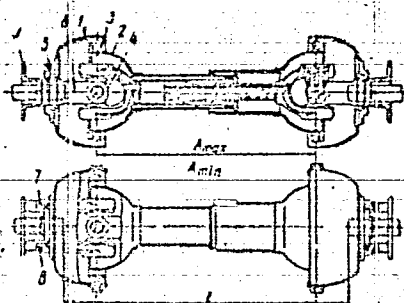


Fig. 1. Cardan shaft with protective housing

1 - Outer hemisphere; 2 - inner hemisphere; 3 - ring; 4 - joint; 5 - sealed bearing; 6 - grooved yoke; 7 - ears; 8 - lugs; 9 - connecting flange.

yokes. To prevent the Cardan shaft from operating without the protective housing, the outer hemispheres are fitted with ears for connection with the appropriate lug of the connecting flange. Orig. art. has: 1 figure. [KT]

SUB CODE: IE/ SUBM DATE: 13Nov63/ ATD PRESS: 4137.

Card 2/2

L 6928-66 EMP(K)/EWA(c)/ENT(d)/EWT(m)/EMP(h)/EMP(b)/EMP(l)/EMP(v)/EMP(t)
 ACCESSION NR: AT5018185 JD/HN UR/3104/65/000/006/0042/0055

AUTHORS: Zanin, A. Ya. (Engineer); Soloveychik, P. M. (Engineer)

TITLE: Wheel rolling machine with horizontal positioning of the formed part

SOURCE: Ural'skiy mashinostroitel'nyy zavod, Sverdlovsk. Nauchno-issledovatel'skiy institut tyazhelogo mashinostroyeniya. Proizvodstvo krupnykh mashin, no. 6, 1965. Prokatnoye oborudovaniye; konstruirovaniye, raschet i issledovaniye (Rolling equipment; construction, design and investigation); sbornik statey, 42-55

TOPIC TAGS: Metal forming, rolling mill, wheel forming, wheel rolling mill

ABSTRACT: A wheel rolling machine with horizontal wheel positioning, which eliminates many of the disadvantages of existing horizontal wheel rolling machines, is described. In all, 13 disadvantages ranging from cycle speed to rolling accuracy are mentioned. Details of the design are shown in 3 detailed figures. The rolling station consists of a main roll and two inclined rolls with the former driven by a dc motor and the latter driven through a common drive. The machine is equipped with an automatic loading, centering, and unloading table which displaces vertically and horizontally to clear all forming rolls. The machine has the following specifications: capacity - up to 150 railroad wheels/hour; 500-2500-mm diameter parts; roll

Card 1/2

L 6928-66

ACCESSION NR: AT5018185

rpm - 180 for inclined rolls, 100 for main roll; hydraulic pressure 60-160 kg/cm²;
size - 13 m long x 10 m wide x 6.8 m high; weight - 250 tons; motors - main roll 250
kw, 500 rpm, inclined rolls 630 kw, 500 rpm; accuracy - 0.2 mm per feed revolution.
Some of the advantages of this type of construction are discussed. Orig. art. has
5 figures.

ASSOCIATION: Ural'skiy mashinostroitel'nyy zavod, Sverdlovsk (Ural Machine Works);
Nauchno-issledovatel'skiy institut tyazhelego mashinostroyeniya (Scientific Research
Institute of Heavy Machine Operation) 4455

SUBMITTED: 00

ENCL: 00

SUB CODE: 1E

NO REF SOV: 004

OTHER: 000

Card 1/2 *ids*

L 20319-66 EWT(d)/EWT(m)/EWP(v)/T/EWP(k)/EWP(h)/EWP(1) DJ

ACCESSION NR: AT5018185

UR/3104/65/000/006/0042/0055

AUTHORS: Zanin, A. Ya. (Engineer); Soloveychik, P. M. (Engineer)

TITLE: Wheel rolling machine with horizontal positioning of the formed part

SOURCE: Ural'skiy mashinostroitel'nyy zavod, Sverdlovsk. Nauchno-issledovatel'skiy institut tyazhelogo mashinostroyeniya. Proizvodstvo krupnykh mashin, no. 6, 1965. Prokatnoye oborudovaniye; konstruirovaniye, raschet-i-issledovaniye (Rolling equipment; construction, design and investigation); sbornik statey, 42-55

TOPIC TAGS: metal forming, rolling mill, wheel forming, wheel rolling mill

ABSTRACT: A wheel rolling machine with horizontal wheel positioning, which eliminates many of the disadvantages of existing horizontal wheel rolling machines, is described. In all, 13 disadvantages ranging from cycle speed to rolling accuracy are mentioned. Details of the design are shown in 3 detailed figures. The rolling station consists of a main roll and two inclined rolls with the former driven by a dc motor and the latter driven through a common drive. The machine is equipped with an automatic loading, centering, and unloading table which displaces vertically and horizontally to clear all forming rolls. The machine has the following specifications: capacity - up to 150 railroad wheels/hour; 500-2500-mm diameter parts; roll

Card 1/2

L 20410-06

ACCESSION NR: AT5018185

rpm - 180 for inclined rolls, 100 for main roll; hydraulic pressure 60-160 kg/cm²; size - 13 m long x 10 m wide x 6.8 m high; weight - 250 tons; motors - main roll 250 kw, 500 rpm, inclined rolls 630 kw, 500 rpm; accuracy - 0.2 mm per feed revolution. Some of the advantages of this type of construction are discussed. Orig. art. has: 5 figures.

ASSOCIATION: Ural'skiy mashinostroitel'nyy zavod, Sverdlovsk (Ural Machine Works); Nauchno-issledovatel'skiy institut tyazheloego mashinostroyeniya (Scientific Research Institute of Heavy Machine Operation)

SUBMITTED: 00

ENCL: 00

SUB CODE: IE

NO REF SOV: 004

OTHER: 000

Card 2/2 vmb

~~ZANKE, KH.~~

~~ZANKE, KH.~~

Geographical science in the German Democratic Republic. Izv. AN
SSSR. Ser. geog. no. 6:134-144 N-D '57. (MIRA 11:1)
(Germany, East--Geography--Study and teaching)

ZANIN, G. V.

PA 237T56

USSR/Geophysics - Erosion

Nov/Dec 52

"Erosional Forms of Relief Which are Due to Seasonal Water Flow, and Their Principles of Forest Improvement," G. V. Zanin, Inst of Geog, Acad Sci USSR

"Iz Ak Nauk SSSR, Ser Geograf" No 6, pp 10-23

Discusses fixed erosional forms and forms of recent washouts. Suggests afforestation and simple engineering techniques of construction to decrease flow to prevent erosion.

237T56

ZANIN, G.V.

Origin of depressions in the Oka-Don lowland. Trudy Inst.geog.
51:33-57 '52. (MLRA 7:11)

(Oka-Don lowlands--Physical geography) (Physical geography--
Oka-Don lowlands)

ZANIN, G.V.

BRITSINA, M.P.; GERASIMOV, I.P.; ZHIVAGO, A.V.; ZANIN, G.V.; FEDOROVICH, B.A.

Iurii Sergeevich Kashin; obituary. Izv.AN SSSR Ser.geog. no.6:92-93 N-D '53.
(MLRA 6:12)

(Kashin, Iurii Sergeevich, 1921-1953)

ZANIN, I. I.

Dissertation: "Primitive and Present-Day Erosion Forms of Relief of the Oksko-Donskoye Plain and Its Interrelation." Cand Geog Sci, Inst of Geography, Acad Sci USSR, 21 May 54. Vechernyaya Moskva, Moscow, 12 May 54.

SO: SUM 284, 26 Nov 1954

ZANIN, G.V.; ALEKSANDROVA, V.D.; KRAVTSOVA, V.I.; SHAVRYGIN, P.I.

Division into natural regions of the new reclaimed farm lands in
the Altai Territory. Izv. AN SSSR. Ser. geog. no. 2:69-72 Mr-Apr '55.
(Altai Territory--Physical geography) (MLRA 8:6)

ZANIN, G.V.; ALEKSANDROVA, V.D.

Physical geographical characteristics of reclaimed virgin and
idle lands in the Altai Territory. Izv. Vses. geog. ob-va 87
no. 3:205-219 My-Je '55. (MLRA 8:9)
(Altai Territory--Physical geography)

ZANIN, G.V.

Recent ravine erosion in the Altai plains and its contrl. Inv.
AN SSSR. Ser.geog. no.6:43-49 N-D '62. (MIRA 15:12)

1. Institut geografii AN SSSR.
(Altai Territory--Erosion)

GAL'TSOV, A.P.; GERASIMOV, I.P.; ZANIN, G.V.; SOBOLEV, L.N.

Scheme of the general program for station field research on the
biogeophysics of natural landforms. Izv. AN SSSR. Ser. geog.
no.5:95-99 S-0 '61. (MIRA 14:9)

1. Institut geografii AN SSSR.
(Physical geography--Research)

ZANIN, G. V.

Relief-forming role of seasonal congelation. Izv. AN SSSR. Ser.
geog. no.2:70-74 Mr-Ap '61. (MIRA 14:3)

1. Institut geografii AN SSSR.
(Central Russian Upland--Frozen ground)

ZANIN, G.V.

Origin of some barrier lakes and continental deltas of mountain rivers
in the Polar Urals. Izv. AN SSSR. Ser. geog. no.6:66-68 H-D '60.
(MIRA 13:10)

1. Institut geografii AN SSSR.
(Ural Mountains--Lakes)

(Ural Mountains--Deltas)

3(5)

SOV/10-59-4-11/29

AUTHOR: Zanin, G.V.

TITLE: Nivosolifluction and Suffosion Landforms in the
Altay Lowlands

PERIODICAL: Izvestiya Akademii nauk SSSR, Seriya geograficheskaya, 1959, Nr 4, pp 91 - 96 (USSR)

ABSTRACT: The article deals with the phenomena of snow-caused soil creep and soil sagging due to underground wash-out as encountered in the Pavlovskiy and Shelabolakhinskiy rayony (Pavlovsk and Shelabolakha Rayons) of the Ob' plateau, Altayskiy Kray, in spring 1955. They appear on the ravine slopes exposed to the north as wide, karren-like niches (Figures 1 to 6) and on the flat country as soil depressions (Figures 7 and 8). These phenomena are due to the peculiarities of the Altay loess-like loam formations and their thickness (15-30 m), which originated in the Quaternary period. As snow in this area tends to melt away rather late (in

Card 1/2

SOV/10-59-4-11/29

Nivosolifluction and Suffosion Landforms in the Altay Lowlands

1955, it melted as late as 15-20 May), the slopes of the ravines are subject to landslides and the flat country to sags, the latter in the shape of caves, sink holes, and underground channels up to 1.5 to 2 m in diameter. There are 5 diagrams, 1 set of diagrams, and 2 photographs.

ASSOCIATION: Institut geografii AN SSSR (Institute of Geography AS USSR)

Card 2/2

15-57-5-5942D

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 5,
p 32 (USSR)

AUTHOR: Zanin, G. V.

TITLE: Ancient and Contemporary Erosional Relief Forms on the
Oka-Don Plain and Their Interrelationships (Drevniye i
sovremennyye erozionnyye formy rel'yefa Oksko-Donskoy
ravliny i ikh vzaimootnosheniya)

ABSTRACT: Bibliographic entry on the author's dissertation for
the degree of Candidate of Geographical Sciences,
Moscow, 1954.

ASSOCIATION: Moscow, 1954.

Card 1/1

ZANIN, M. I.

AUTHORS: Golub, B. I., and Zanin, M. I.

TITLE: Automatic Switch on Machines for Tests for Fatigue under Torsion
Avtomaticheskii vyklyuchatel' k mashinam dlya ispytaniya na
ustalost' pri kruchenii)

PERIODICAL: Zavodskaya Laboratoriya, 1957, Vol. 23, No. 1, pp. 104-105 (U.S.S.R.)

ABSTRACT: The authors find that in the designing of a cutout switch for machines, testing for fatigue under torsion is made difficult by the fact that there is practically no displacement either of the part tested or some part of the machine. They have developed a cutout switch for the machine with a torsion dynamometer. Contact is effected between a plunger and mercury under given conditions of vibration, causing a current to operate the switch. The details of the mechanism are explained with a drawing of the mercury circuit-closing device and the layout of the switch circuit. There are no references cited.

ASSOCIATION:

Card 1/2

Automatic Switch on Machines for Tests for
Fatigue under Torsion

PRESENTED BY:

SUBMITTED:

AVAILABLE:

Card 2/2

ZANIN, M.V.

Lead isotopes in geology. Vop.rud.geofiz. no.4:137-142 '64.
(MIRA 18:1)

BASKOV. G.M., gornyy inzh.; ZANIN, N.I., ekonomist

Methods of writing off the expenses for stripping operations in
coal mines. Ugol' 40 no.9:24-26 S '65.

(MIRA 18:10)

ZANIN, V.

Several problems in planning and utilizing working time. Sots.
trud 6 no. 1:99-107 Ja '61. (MIRA 14:1)
(Time study)

IMSHENETSKIY, A.A., akademik; YEFIMCHINA, Ye.F.; NIKITIN, L.Ye.; ZANIN, V.A.

Bacterial decomposition of cholesterol in the human blood serum.
Dokl. AN SSSR 161 no.3:701-703 Mr '65.

(MIRA 18:4)

1. Institut mikrobiologii AN SSSR.

ZANIN, V. (Novosibirsk)

Labor productivity and the utilization of working time.

Vop.ekon. no.9:74-80 S '61.

(MIRA 14:8)

(Labor productivity)

(Time study)

ZANIN, Vadim Ivanovich; ISAYEV, Ye.N., kand. ekon. nauk, otv. red.;
SNITSARENKO, A.A., red.; YELISTRATOVA, Ye.M., tekhn. red.

[Working time and labor productivity] Rabochee vremia i
proizvoditel'nost' truda. Novosibirsk, Izd-vo Sibirskogo
otd-nia AN SSSR, 1963. 114 p. (MIRA 16:10)
(Labor productivity) (Time study)

ZANIN, V.I.

Utilization and Planning of Work Time

The following dissertations were defended in the Joint Scientific Council on the Economic Sciences and the Humanities, Candidate of Economic Sciences.

Vestnik Akad Nauk, No. 4, 1963 pp. 119-145

ZANIN, Yu.

Origin and distribution of stylolites in carbonate rocks. Geol. i
geofiz. no.11:98-101 '60. (MIRA 14:2)

1. Irkutskoye geologicheskoye upravleniye.
(Rocks, Carbonate) (Stylolites)

ZANIN, Yu.N.; OGIYENKO, L.V.

Ordovician stratigraphy of the southwestern part of the
Irkutsk amphitheater. Sov. geol. 7 no.4:109-114 Ap'64.
(MIRA 17:5)

1. Irkutskoye geologicheskoye upravleniye.

BERLIN, I.A.; ZANINA, A.A.; YEGOROVA, A.Yu.

Some characteristics of the diurnal variation of the air
temperature and relative humidity on the territory of the
U.S.S.R. Trudy GGO no. 112:176-186 '63. (MIRA 17:5)

~~SECRET~~

36-65-8/10

AUTHOR: Zanina, A.A.

TITLE: Characterization of Temperature Anomalies Under Conditions of the Mountainous Relief and Coastal Plains of Scandinavia (O kharakteristikakh temperaturnykh anomalii v usloviyakh gornogo rel'yefa i poberezh'ya)

PERIODICAL: Trudy Glavnoy geofizicheskoy observatorii, 1956, Nr 65(127), pp. 83-92 (USSR)

ABSTRACT: This is an extensive study of the spatial and temporal distribution of temperature anomalies in the complex physico-geographical conditions of the Scandinavian peninsula, where the influence of subjacent surfaces is particularly strong and where the transition from marine to continental conditions occurs very quickly. There are 6 figures and 3 references, all USSR.

AVAILABLE: Library of Congress

Card 1/1

ZANINA, Anastasiya Andreyevna; LEBEDEV, A.N., kand. geogr. nauk,
red.; VAYTSMAN, A.I., red.

[Climate of the Scandinavian peninsula] Klimat Skandinavskogo
poluostrova. Leningrad, Gidrometeoizdat, 1964. 51 p.
(MIRA 17:7)

3(7)

PHASE I BOOK EXPLOITATION

SOV/1819

Zanina, Anastasiya Andreyevna

Dal'nevostochnyye rayony, Kamchatka i Sakhalin (Far East Regions: Kamchatka and Sakhalin) Leningrad, Gidrometeor. izd-vo, 1958. 166 p. (Series: Klimat SSSR, vyp. 6) Errata slip inserted 1,200 copies printed.

Sponsoring Agencies: USSR. Glavnoye upravleniye gidrometeorologicheskoy sluzhby, and Glavnaya geofizicheskaya observatoriyz. im. A.I. Voyeykova.

Resp. Ed.: T.V. Pokrovskaya; Ed: L.P. Zhdanova; Tech. Ed.: O.G. Vladimirov,

PURPOSE: This book is intended for klimatologists, agrometeorologists, and geographers, as well as for vuz students.

COVERAGE: This book describes the characteristics of the basic climate-forming factors (the peculiarities of the radiation budget, the circulation processes, the effect of relief and

Card 1/6

Far East Regions: Kamchatka and Sakhalin

SOV/1819

sea). It presents a brief outline of seasonal climates, and a description of the individual climatic factors (thermal and wind conditions, humidity rate) in the Far East. The book is the 6th volume of a series entitled "Klimat SSSR". The series treats the following regions: 1. European Territory, 2. Caucasus, 3. Central Asia, 4. Western Siberia, 5. Eastern Siberia, 6. Far East Regions: Kamchatka and Sakhalin. There are 46 references of which 44 are Soviet and 2 English.

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Far East Regions: Kamchatka and Sakhalin

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Far East Regions: Kamchatka and Sakhalin

SOV/1819

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AVAILABLE: Library of Congress

Card 6/6

MM/ad
6-15-59

ZANINA, Anastasiya Andreyovna; POKROVSKAYA, T.V., otv.red.; ZHDANOVA, L.P.,
red.; VLADIMIROV, O.G., tekhn.red.

[Regions of the Far East, Kamchatka, and Sakhalin] Dal'nevostochnye
raiony, Kamchatka i Sakhalin. Leningrad, Gidrometeor. izd-vo,
1958. 166 p. (Klimat SSSR, no.6) (MIRA 12:2)
(Soviet Far East--Climate)

ZANINA, A.A.

Temperature conditions in the Far Eastern regions of the
U.S.S.R. Trudy GGO no.132:121-140 '62. (MIRA 15:8)
(Soviet Far East--Atmospheric temperature)

ZANINA, Anastasiya Andreyevna; GOL'TSBERG, I.A., otv. red.; VAYTSMAN,
A.I., red.; BRAYNINA, M.I., tekhn. red.

[Caucasus] Kavkaz. Leningrad, Gidrometeor.izd-vo, 1961. 289 p.
(Klimat SSSR, no.2) (MIRA 15:1)
(Caucasus--Climate)

88712

S/076/61/035/001/016/022
B004/B060

AUTHORS: Marshakov, I. K. and Zanina, A. N.

TITLE: Mechanism of the corrosive destruction of iron along the water line

PERIODICAL: Zhurnal fizicheskoy khimii, v. 35, no. 1, 1961, 206-211

TEXT: The authors were concerned with the problem of the intensive corrosion of low-alloy steels along the water line, i.e., along the line separating the corroding medium from the atmosphere. According to I. L. Rozenfel'd and K. A. Zhigalova (Ref. 1) the process has a different course depending on whether the electrolyte surface remains immobile, or whether its level fluctuates. The corrosion of Armco iron was examined in various media with the surface at rest. The formation of differential aeration couples was observed. Fig. 1 shows the element "metal in water line - metal dipped in electrolyte". The following results were obtained: An intensive corrosion appeared along the water line in acid media and in neutral solutions containing inhibitors such as bichromates, nitrates, or phosphates. The iron did not undergo any intensive corrosion along the

Card 1/3

88712

Mechanism of the corrosive destruction ...

S/076/61/035/001/016/022
B004/B060

water line in neutral chlorides and sulfates. An intensive local destruction may take place, however, in media with a low electrical conductivity. Due to the difference in access of oxygen to the iron of the water line and iron dipped into the electrolyte, differential aeration couples are formed, the anode being provided by the iron dipped into the electrolyte. In media with a low electrical conductivity (tap water) the currents of these elements concentrate and give rise to intensified corrosion somewhat below the water line. The intensive etching of iron along the water line in acid media is not, as hitherto assumed, caused by a stronger precipitation of the corrosion products at the water - air interface, but by the action of corrosion macrocells, whose anode is the Fe in the water line. The cause of the formation of such cells is the rapid increase of the pH of the electrolyte which forms the meniscus. In neutral electrolytes containing inhibitors, the corrosion of Fe is similar to that in narrow slits and crevices. Due to an impeded access of the inhibitor to the electrolyte forming the meniscus there arise active - passive cells, which give rise to the intensive corrosion. There are 4 figures, 1 table, and 9 references: 6 Soviet-bloc and 2 non-Soviet-bloc.

Card 2/3

88712

Mechanism of the corrosive destruction ...

S/076/61/035/001/016/022
B004/B060

ASSOCIATION: Voronezhskiy gosudarstvennyy universitet (Voronezh State University)

SUBMITTED: May 21, 1959

Legend to Fig. 1. Change of current strength with time. 1: 0.1 M Na_2SO_4 ; 2: 0.1 M H_2SO_4 ; length of water line 12 cm (at either side of the specimen; area of the specimen dipped into the electrolyte 50 cm^2 ; a) time, min; b) anode in the electrolyte; c) anode in the water line.

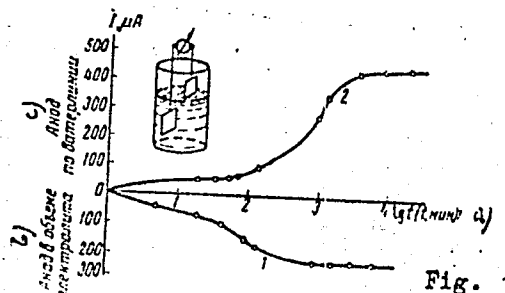


Fig. 1

Card 3/3

MARSHAKOV, I.K.; ZANINA, A.N.

Mechanism of the waterline corrosion of iron. Zhur. fiz. khim.
35 no.1:206-211 Ja '61. (MIRA 14:2)

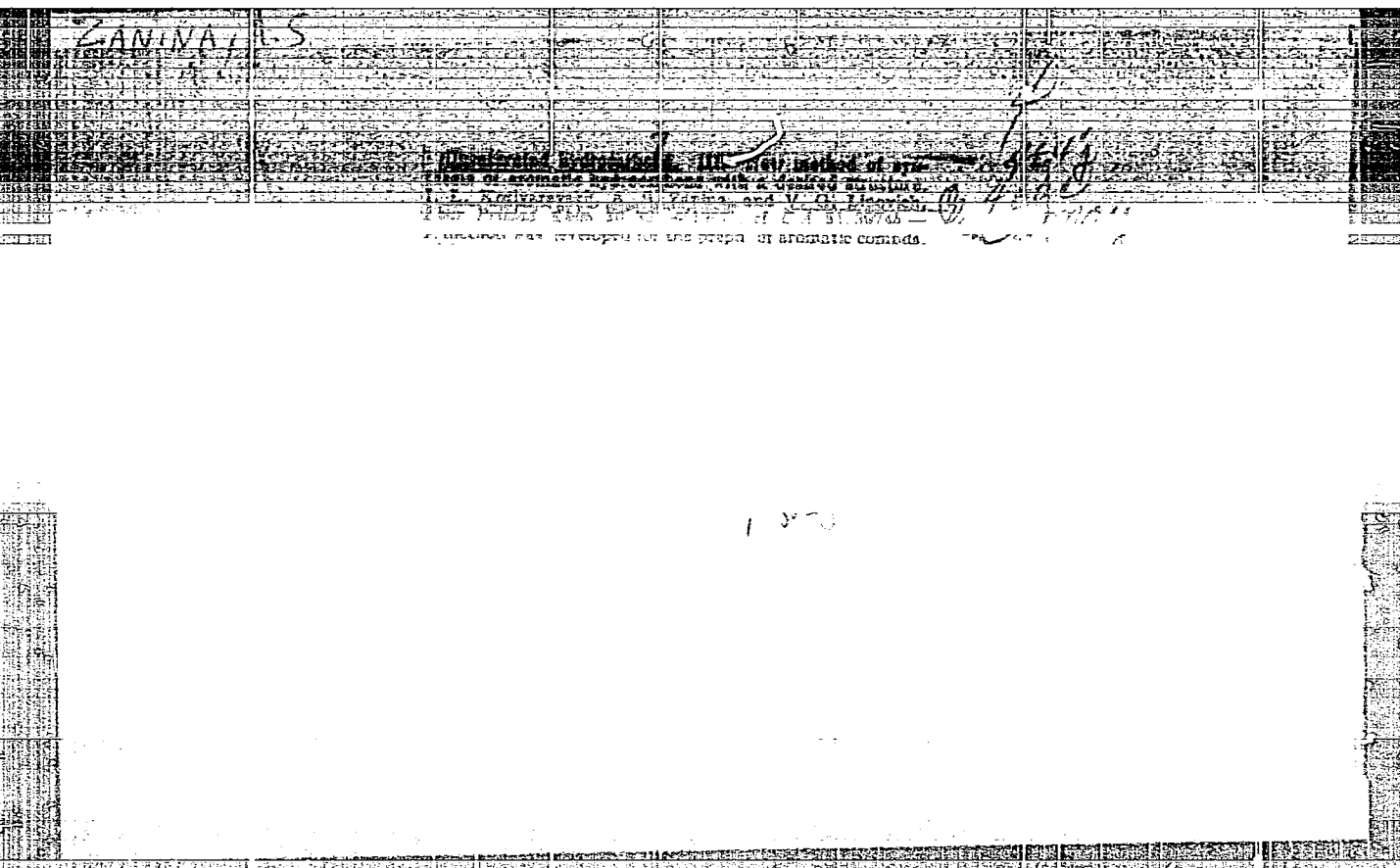
1. Voronezhskiy gosudarstvennyy universitet.
(Iron—Corrosion)

ZANINA, A.S.

KOTLYAREVSKIY, I.L.; ZANINA, A.S.; LIPOVICH, V.G.

Aromatization of divinylacetylene. Izv.vost.fil.AN SSSR no.4/5:90-99
'57. (MLRA 10:9)

1. Vostochno-Sibirskiy filial Akademii nauk SSSR.
(Acetylene) (Aromatic compounds)



[illegible]

TECHNICAL VIETNAM VOUCHERS, B. 115-13. Since the latter

AUTHORS: Kotlyarevskiy, I.L. and Zanina, A.S. SOV/80-59-1-33/44

TITLE: Synthesis of β -Methyl Naphthalene (Sintez β -metilnaftalina)
Sixth Communication (Sobshcheniye VI)

PERIODICAL: Zhurnal prikladnoy khimii, 1959, Nr 1, pp 207-210 (USSR)

ABSTRACT: In the previous papers of this series (this is the 6th one from the series of unsaturated hydrocarbons studies), the authors showed that the divinylacetylene and its alkyl derivatives can be completed into aromatic hydrocarbons under the effect of certain catalyzers, such as aluminum oxide, chrome oxide, etc. This reaction can be used for the synthesis of aromatic hydrocarbons with a prescribed structure. The authors carried out the aromatization of isopropenylcyclohexenylacetylene which resulted in obtaining β -methyl naphthalene. When the 2-methyl-4-(cyclohexene-1-yl)-butene is used in the process of aromatization the yield and individuality of the substance are increased. There are 2 tables and 4 Soviet references.

SUBMITTED: March 2, 1957

5(1,3)
AUTHORS: Kotlyarevskiy, I. L., Fisher, L. B., Zanina, A. S., Terpugova, M. P., Volkov, A. N., Shvartsberg, M. S.

TITLE: Synthesis of Several Monomers on Alumochromium Catalysts

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ABSTRACT: A report on this paper was given at the All-Union Conference on "Ways of Synthesis of Initial Products for the Production of High Polymers" which took place in Yaroslavl' from September 29 to October 2, 1958. The results of the catalytic synthesis of 2,3-dimethyl-butadiene-1,3 as well as of monomers of the type of p-xylene from acetylene derivatives are given. The substance mentioned at first can be used in the production of special rubber types (Ref 1). It could not be obtained by the production methods so far used. The diagram (see Diagram) being worked at by the authors consists of two stages. The first one (Ref 2) yielded not more than 15% of the end product. In spite of numerous patents (Ref 3), a thorough description of reaction conditions is still missing. Therefore, the authors determined the optimum conditions of isobutane alkylation with ethylene

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in the presence of aluminum chloride. Under these conditions (48 - 51°, 7 - 9 atm, 1.5 kg isobutane, 145 g ethylene, 40 g C_2H_5Cl , 5 g $AlCl_3$, 2 hours) the yield of 2,3-dimethyl-butane rises to 47%. The reaction is very sensitive to temperature (only 1/3 of the alkylate yield at 35°). The catalyst can be used 5 to 6 times without reducing the quantity of alkylate or of 2,3-dimethyl-butane. Ethylene has to be added during the whole process: its partial pressure must not exceed 0.5 - 0.7 atm, or otherwise the 2,3-dimethyl-butane content in the alkylate decreases rapidly. The addition of 1-3% C_2H_5Cl accelerates the process. Isobutane alkylation with ethylene at a high temperature proceeds at a pressure of 100 - 200 atm according to a radical mechanism, and is accelerated by radical donors. It was carried out by the authors in the presence of C_2H_5Cl (for the first time) in a special, continuously working plant. The alkylate yield (computed for ethylene) reached 170-180% under optimum conditions (450°, 200 atm, reaction time 25 minutes, weight ratio isobutane : ethylene = 10 : 1, initiator quantity 2.5%). 2,2-Dimethyl-butane (32-35% of the alkylate) was the

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